TWINCA EASY

User Manual

TWINCA EASY User Manuel

Contents

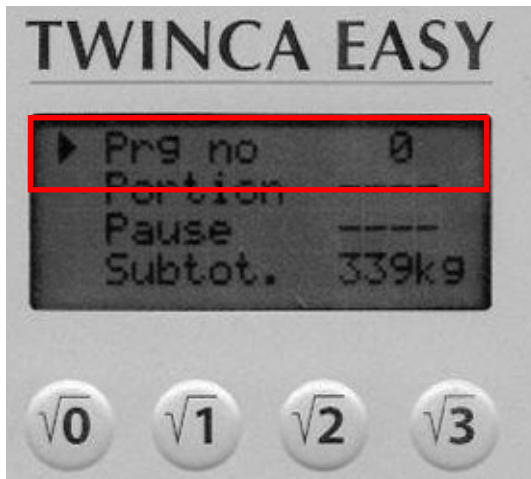# TWINCA EASY User Manuel

Start and manuel feeding

Figure 1

Booting

The computer always starts up with this page. When this page is shown it is in manually fed (program 0) distribution of feed starts when feeding pedal is activated. For automatic feeding, press on the desired application, 1-30

Entering numbers in the menu

Next to each line in the main menu[1] the symbol ► arrow, which moves up and down with the arrow keys on your keyboard ▲ ▼ . Set the arrow in front of the topic you want changed. Entering is started by pressing the OK - key. By entering the new value, a new page is shown which is explanatory to the desired topic.
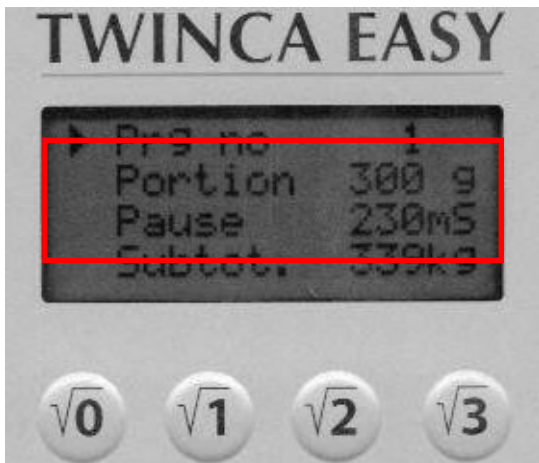
Automatic feeding

Figure 2

Entering the feed quantity

Before automatic feeding, you must enter the desired quantity (up to 5000 g) and the desired pause time (0-1999 mS). When the pedal is pressed down, the feed occurs in pulses, of which the length is determined by the entered values. Feed Quantity in any program can be amended in 5g intervals directly from the keyboard with the ▲ ▼ keys as well as pausing time with the PAUSE keys to 10mS range. *The modified values are automatically saved*

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[1] The main menu is called a revolving menu, which means it is endless, you always come back where you started if you keep scrolling

Register

Figure 3

Subtotal and Total

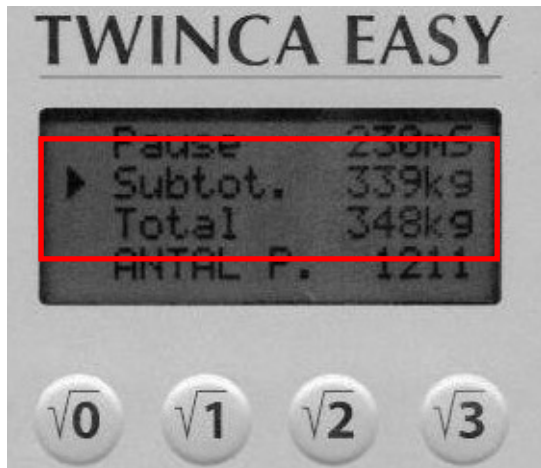There are two application titles which enumerates the amount of feed that is fed, **"Subtot"** and **"Total"** (Ton-Kg-Gram), each of these records can be reset. Set the arrow ► before **"Subtot"** or **"Total"** and press √OK for each of these records, a new page is showing the quantity. Now you can choose to reset the register, press √0 or press √OK to return to the main menu. *Note*: **Total** also resets the subtot register.
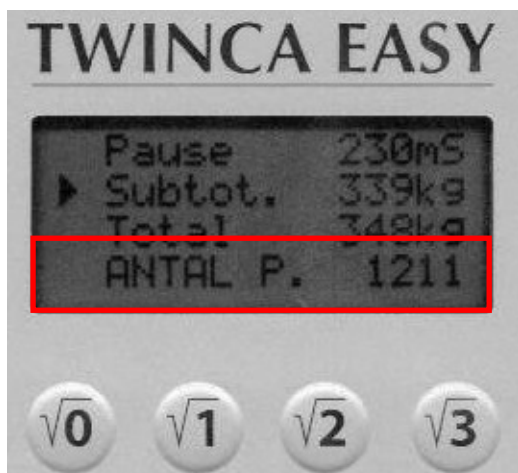

Figure 4

Number of servings

In this menu, it is shown in Figuree 4 the counted number of fed portions. Set the ► in front of the field **"NUMBER OF P."** and press √OK and the menu opens, press √0 to reset the count or press √OK to return to main menu.
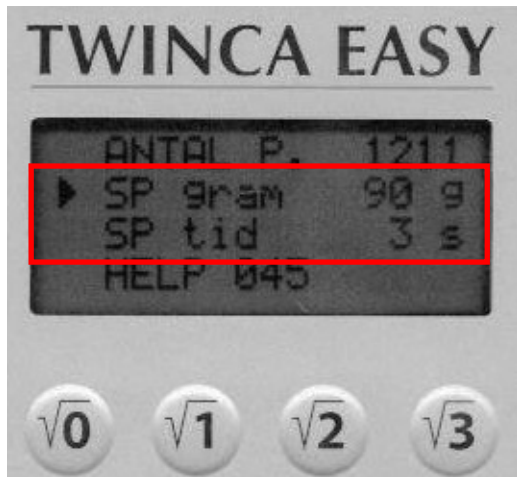
Extra start portion

Figure 5

SP gram and SP time

SP gram and SP time gives an extra portion at the start after a break. As shown in Figuree 5 **"SP gram"** is set at 90 grams, and **"SP time"** is set to 3 sec. This means, that every time the foot pedal has not been activated for 3 seconds there is an additional amount of 90 grams in the next portion. These two values can be changed by placing the ► arrow next to the line you wish to change and press ⌇OK, so there will be a new page up to change the selected value with numbers on the keypad, the changed value is saved by pressing ⌇OK the menu may also be exited unchanged by pressing ⌇OK.

Help

Figure 6

HELP

As shown in Figuree 6 you can see it says 045 and it is the version number of the software that is installed in feed computer. Move the arrow ► to HELP and press ⌇OK the Twinca's telephone number which also acts as a service telephone number.

Input

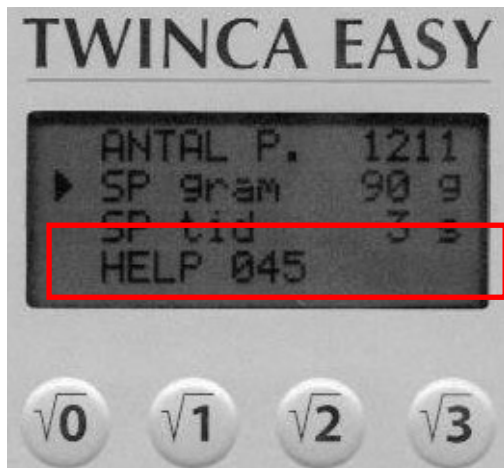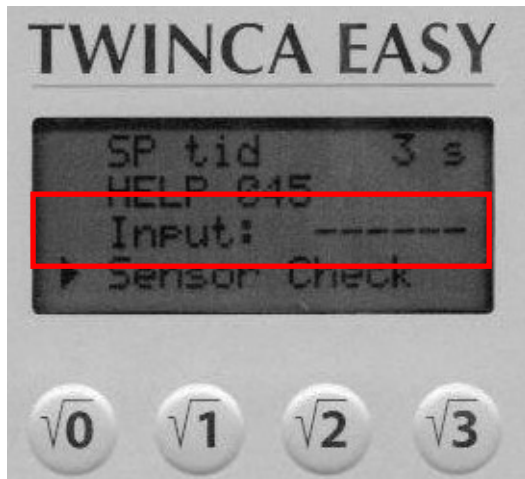**Figure 7**

Using the input foot pedal

As shown in Figuree 7 there are 5 lines that are highlighted "Input: _ _ _ _ _" This function is a bit like a self-help, press the foot pedal and a "F" will appear on the first line which says that there is a signal from foot pedal.

Using the input feed pump sensor

If the sensor is slightly off down to the pump and the sensor lights yellow an "E" should appear on the next line, if the sencor on the pump does not light up, you can gently insert a thin piece of metal between the sensor and sensor wheel on the feed pump, when the sensor is covered an "E" must appear on the second line.

Sensor Check

Figure 8

Access to the sensor check

To use the sensor checks the feed computer must be in the feed program "0" (Manual). Sensor check is a program which is built into the feed computer, so you can see whether the sensor is set correctly in relation to the wheel sensor on the feed pump. Move the arrow ► with [∧] [∨] until it reaches the "Sensor Check" as in Figuree 8 and press [√OK] to enter into the program.
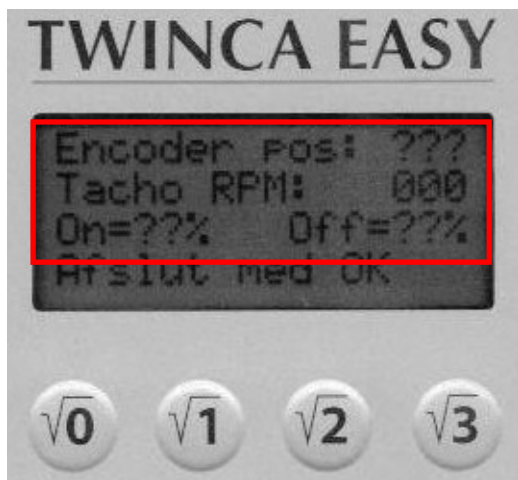
Figure 9

Feature Description

Sensor checks shall be carried out in the feed program "0" So that you can run the feed pump manually. (It does not matter whether the pump is running forward or backward under the sensor check, in case the feed tank is full of feed) in the first line the says **"Encoder pos: ?? "**when the feed pump starts it will be written that the sensor must **" In "**,or **" Out "** or it is**" Ok "** with the question marks **"???"**. In the second line **"Tacho RPM: 000"** indicates revolutions of the feed pump. The third line writes the **"On =?% Off =??%"**, when feed pump is operating there is a figuree writtne where "??" is indicated, these two figure indicated must be as close to 50% as possible, with a tolerance of ± 5%, representing between 45% and 55% of On and Off.

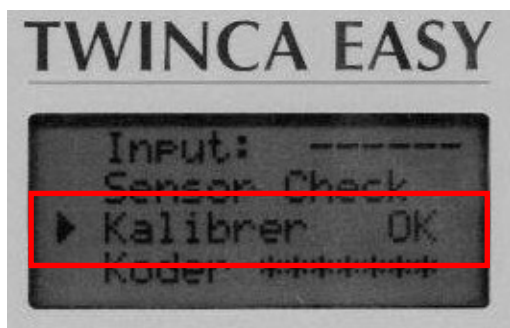Sensor check ends by pressing √OK.

Calibrating

Figure 10

Opening the calibration program

The calibration must be performed in program "0" (manual), see Figuree 10. To calibrate the feed computer, move the arrow ► to calibrate and press √OK. This will now show a new display picture, see Figuree 10.1.
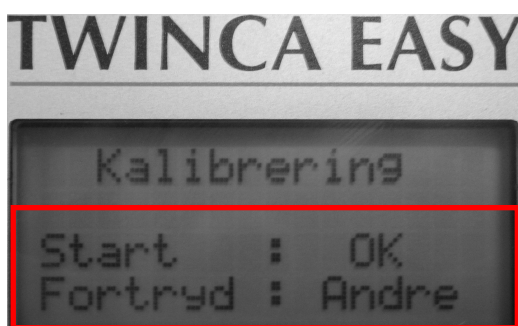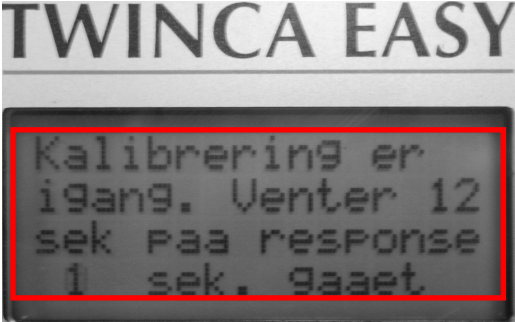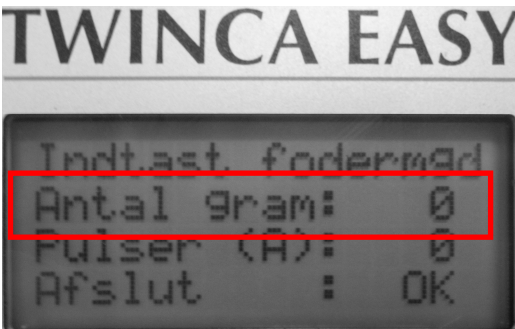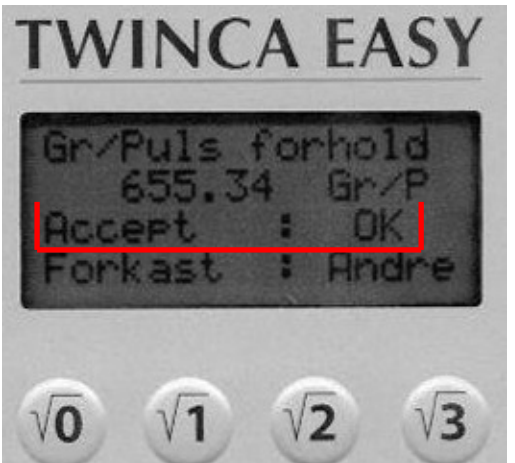

Figure 10.1

Starting the calibration

Before starting calibration, you must take a clean bucket and weigh it to 0 on a scale. Start the machine and adjust the rpm to the same speed as when driving during feeding, hold the feed tube into the bucket and start the calibration. To start the calibration press √OK. If you have entered the calibration program in error, the program may be terminated by pressing any other key ⊠ than √OK. See Figuree 10.1.

|	
Figure 10.2	**Calibration in progress** When calibration is started, depending on the type of machine, it will run either, 6 small servings or one large unit into the bucket and then the pump stops again. **Remember the bucket must be weighed at 0!!!!**
Figure 10.3	**Entering weight** Weigh the amount of feed in the bucket and enter the weight in grams, but the numbers on the keypad, the numbers will appear in the **"Antal gram: XXXX"** **XXXX** = enter numbers. Number of pulses, the machine will count and put themselves into the line **"Pulse (A):** *(number of pulses) *" End of press. **NOTE:. If the information is incorrectly entered, it will just continue over top.**
Figure 11	**Approval of the calibration** This window displays the value as a feed computer is arrived at by the calibration, the value is an expression of how many Gram provided per. pulse from the sensor on the feed pump, a feed pump will be around. 3.3 Gr / P, and a feed pump is worn and soon to be replaced will be around. 1.8 Gr / p. To accept the calibration, press √OK. To reject (not accept) the calibration, press on <u>any other key</u> √OK than √OK. And you will return to the window as shown in figure 10.1.
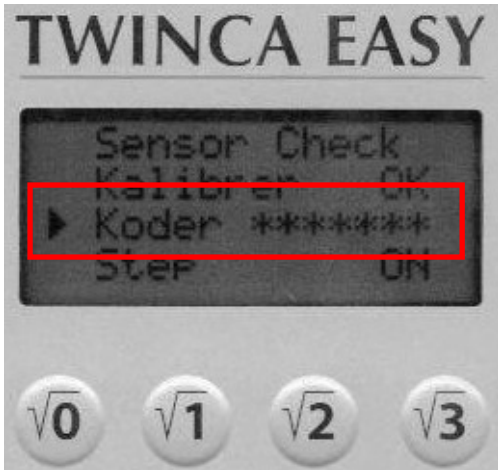
Codes

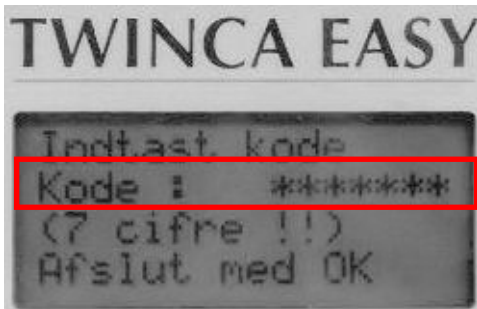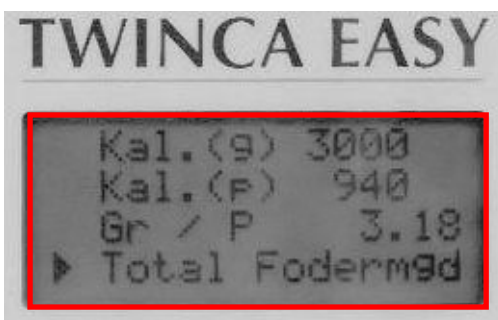|	
 Figuree 12	**Service Codes** This line is designed for our service men. But here you can also go in and see what the calibration number is by pressing √OK
 Figuree 12.1	**Codes** When the √OK is pressed, it will ask for a code which is **"1234567"** press √OK again and it will open up
 Figure 12.2	**Calibration figure** You can view last calibration figure, representing the last feed the computer calibrated. **"Gr / P"** can also be used to see how worn the feed pump is, a new pump is around 3.30 and when the pump reaches near 1.80 the machine may have difficulty feeding just because there is so much pressure loss in the pump.
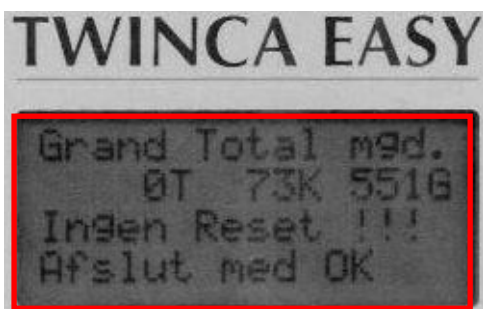
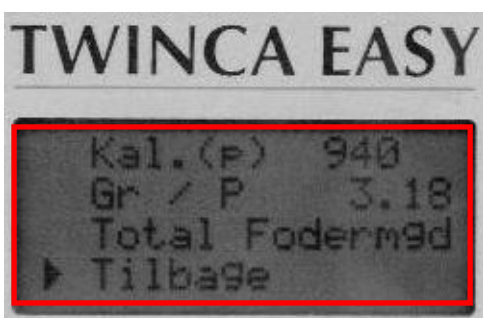|	
 Figure 12.3	**Total feed consumption** move the ► arrow down to **"Total Fodermgd"** (total amount of feed)(see Figuree 12.2) and press √OK .and you enter into where you can see how much the feed pump has pumped out since it was new. To get out again pressed √OK .
 Figure 12.4	**End the Code menu** Move the arrow down to **"Tilbage"** and press √OK and you have now out into the main menu again.

Step

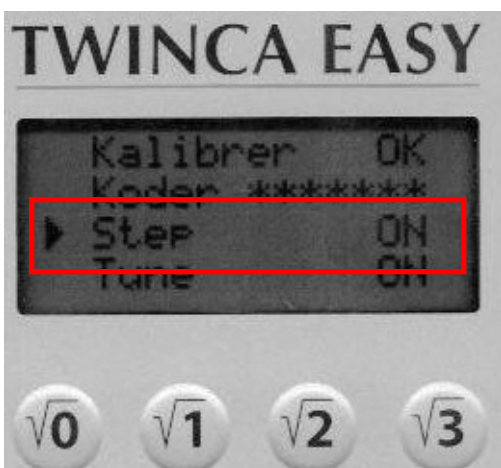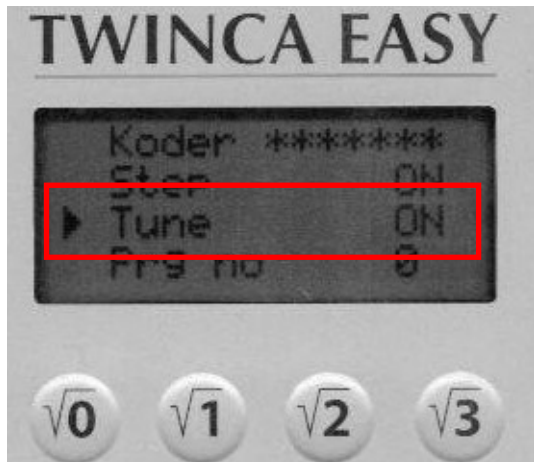|	
 Figure 13	**Step Status** This line indicates whether you have access to the step program, if you have Step, there will be **"Step On"** if you do not have Step it will read **"Step off"** and this line has no function, you have individual feeding read more under "Individual feeding EASY (Step) See page 12

Tune

Figure 14

Using Tune function

Before you can use the Tune feature, you must be in a different program than 0. When you select "Tune" run the feed pump as in the calibration, but this only measures the machine's operating condition. Set the arrow ► before **"Tune"**, hold the feeding hose over the feed tank, and press ✓OK. The pump will now pump out 6 servings. After tuning the computer will create a new calculation, and will again precisely dose I.H.T., according to the entered quantity and feed consistency. Tune function is to be used when the machine is started up for the first time every day, and when changing the speed of feed pump and the speed of the diesel engine.
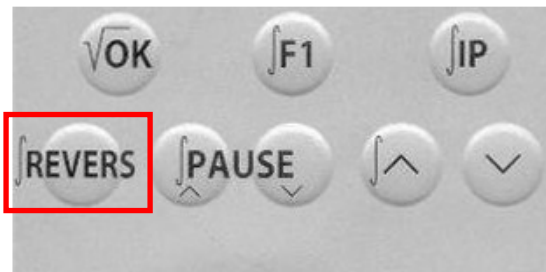
Cleaning (REVERS)

Figure 14.1

REVERSE
This button is used to set the feed pump in continuous mode, the REVERS button must be held down for 3 seconds to start this mode, the continuous operation can be stopped by pressing any key or press the feed foot pedal. This function may be used during cleaning.
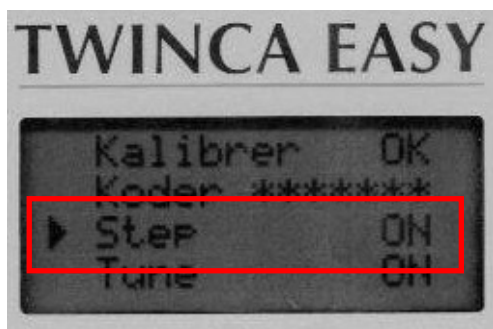
Individual feeding with EASY (Step)

Figure 15

Go into Step

position the ► arrow next to the step menu and press ✓OK and the step menu appears, or if the PDA is connected, step will automatically enter the step menu.

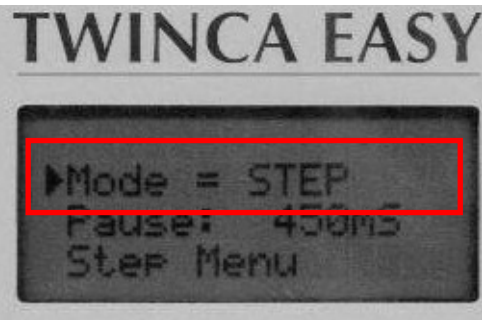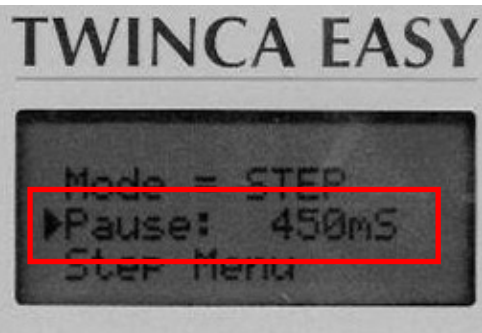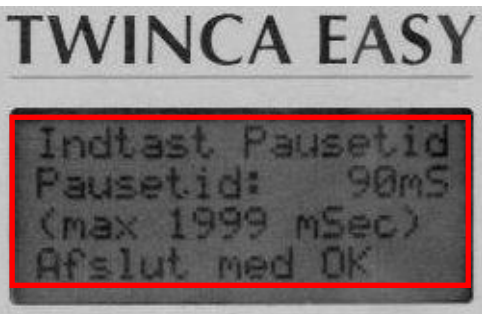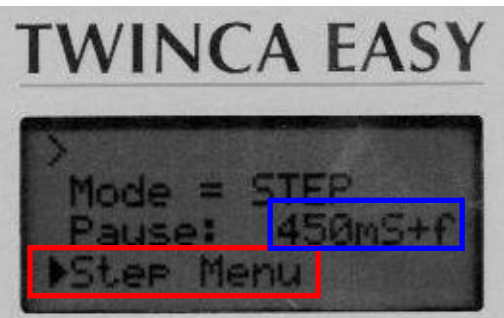|	
Figure 16	**Mode** arrow> is now next to **"Mode = STEP"** showing the arrow ► if while feeding, something becomes lodged in the feed pump, so it is stuck, press √OK and the computer writes **"Mode = MANUAL"**, you can then free the obstruction in the pump without continuing wiht the numbers of the cages. When the pump is running normal again, just press √OK and you are back to feeding individually ...
Figure 17	**Pause** The pause is the pause time between portions move the arrow ► down to **"Pause"** and press √OK and the pause times can be changed (see Figuree 17.1)the pause time can be entered with numbers on the keypad and exit by pressing √OK
Figure 17.1	**Quick regulating** There may also be quick regulatons made with the two arrows which are located at the bottom of the feed computers keyboard, respectively 10ms up or down. PAUSE
Figure 18	**Step menu** Move the arrow ► down to Step Menu and press √OK and you enter into the Step Menu, a menu with more funcitons to ease the job of feeding.
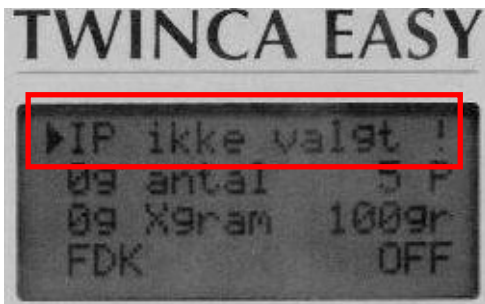
Figure 19

IP (Individual Pause)

IP stands for individual pause time and this can be activated by pressing [IP] on the keyboard of the **EASY s** where a **"+"** will appear at the pause time **(See figuree 18.) in the blue frame.**
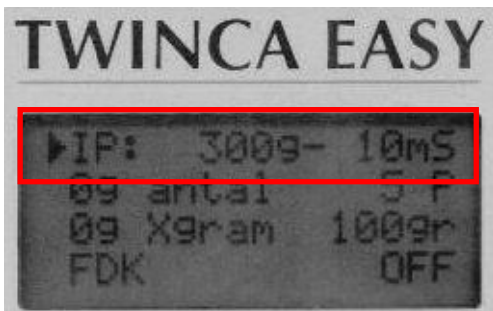

Figure 19.1

IP "on"- "off"

If "**IP ikke valgt !**" (se figure 19) is indicated press [IP] and this screen view will appear. To make changes to the **IP** mover the arrow ► up to "**IP**" and press [√OK] and the menue will open.
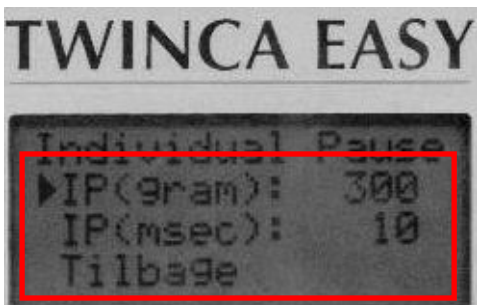

Figure 19.2

Changing the IP

This menu **Individual pause. "IP(gram)"** or **"IP(msec)"** Set the arrow ► beside the desired change and press [√OK] this can be changed sot it will fit better with the pause time between large and small feed portions. **"IP(msec)"** fits in as a rule with 10mS, while **"IP(gram)"** must be at about **400** gram under the highest pumped out portion, if you wihs to achieve the desired effect. To end the **IP** menue move the arrow ► to the **"Tilbage"** and press [√OK].
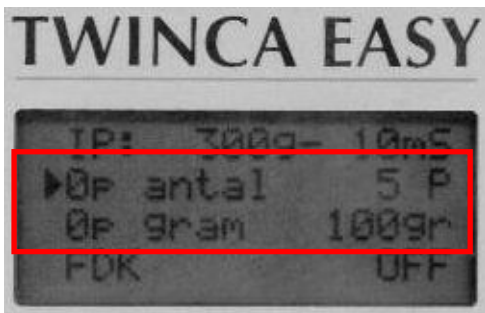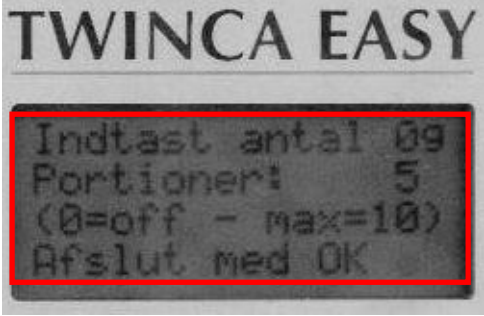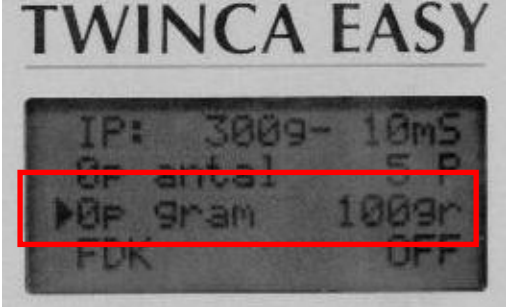

Figure 20

0-gram

It is a feature which compensates for pressure loss in the tube when there is an empty cage in the middle of a row. Press [√OK]. When the ► arrow is next to **"0g antal"** and the menun opens. As the menue is set now, (figuree.20) it is set to yield 5 (0 servings) 100 g extra at first portion. The extra portion will not be, or be seen in the feed registration at the next cages receiving portions.

Figure 20.1

Number of 0 servings

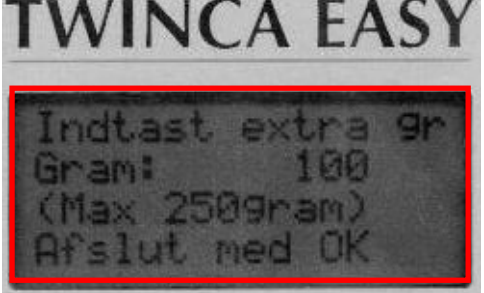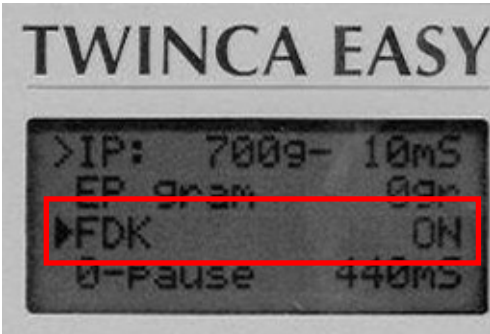Here you can set how many **0 portions** needed to to give an extra dollop, to compensate for pressure loss in the feed tube, **0 = off**, therefore the feature is turned off. If you want to change this, enter the desired number of **0 portions**, for example 5 as shown in Figuree 20.1 then press ^{√OK} and change is saved.

Figuree 21

Number of Gram to compensate after 0 Portions

To change the amount of grams in 0 portions move the arrow

► down to "**0g Xgram**" and press ^{√OK} and a new menu will open (See figuree 21.1)

Figuree 21.1

Number of Grams to compensate for after 0 Portions

Enter the number of extra grams to be given in the first portion after **0 portions** that will compensation for the pressure loss arising in the feed tube for example 100 Grams and end with ^{√OK} in order to save.

Figuree 22

FDK

If **FDK** is **"ON"** pump out one whole feed portion, this will mean that the portion cannot be split in half in the case that you may not want tho feed a whole portion on one cage. To put the function in the **"ON"** or **"OFF"** move the ► arrow to **FDK** and press ^{√OK} and it switches between **"ON"** or **"OFF".** If the menu is **"ON",** it is visable in step next to the pause time an "F" is visable (See Fig. 18) in the blue frame
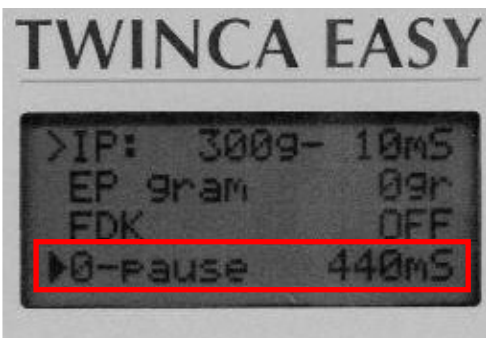
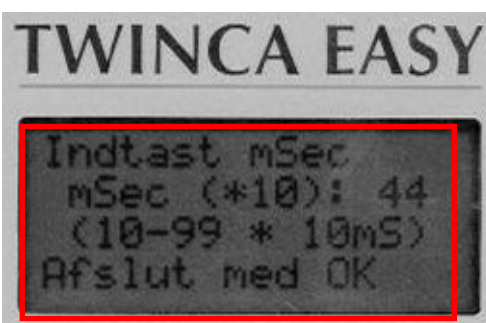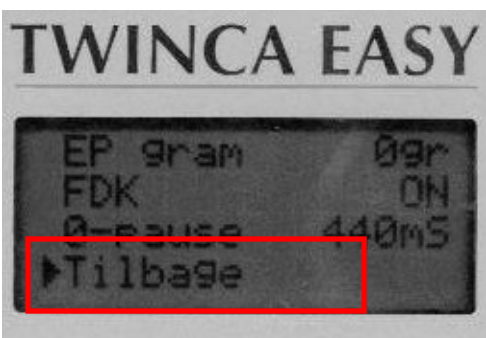|	
Figuree 23	**0-pause** 0-pause is used in the situation if you come to an empty cage in a row while feeding which can keyed in as a paused time in order to continue in the same rhythm of feeding, to set the time, move ► arrow down to **"0-pause"** and press $\sqrt{OK}$.
Figuree 24	**Setting 0-pause time** Here you can put **0-pause** as you want it, menu timesed with 10ms when you press the desired pause value, press $\sqrt{OK}$ and it is saved and you will be automatically out of step again.
Figuree 25	**Exit step menu** Move the arrow ► down to **"Tilbage"** and press $\sqrt{OK}$ and you get out of step again.
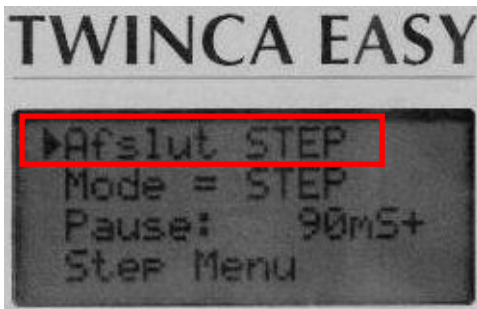
Figuree 26	**End step** Move the arrow ► up to the top of the screen where it desplays **afslut step** press ⟦OK⟧ and now you are back to the main menu.

Contact information toTwinca

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